

July 12, 2023

Docket No.: 52-026

ND-23-0394
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.7.02.03a [Index Number 703]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) item 2.7.02.03a [Index Number 703] which verifies component flow rates, Main Control Room (MCR) controls, and MCR indications for the Central Chilled Water System (VWS). The closure process for this ITAAC is based on the guidance described in NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted,



Jamie M. Coleman
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.7.02.03a [Index Number 703]

JMC/PAW/sfr

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cc: Regional Administrator, Region II
 Director, Office of Nuclear Reactor Regulation (NRR)
 Director, Vogtle Project Office NRR
 Senior Resident Inspector – Vogtle 3 & 4

**Southern Nuclear Operating Company
ND-23-0394
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.7.02.03a [Index Number 703]**

ITAAC Statement

Design Commitment

- 3.a) The VWS provides chilled water to the supply air handling units serving the MCR, the Class 1E electrical rooms, and the unit coolers serving the RNS and CVS pump rooms.
4. Controls exist in the MCR to cause the components identified in Table 2.7.2-1 to perform the listed function.
5. Displays of the parameters identified in Table 2.7.2-1 can be retrieved in the MCR.

Inspections/Tests/Analyses

Testing will be performed by measuring the flow rates to the chilled water cooling coils.

Testing will be performed on the components in Table 2.7.2-1 using controls in the MCR.

Inspection will be performed for retrievability of parameters in the MCR.

Acceptance Criteria

The water flow to each cooling coil equals or exceeds the following:

<u>Coil</u>	<u>Flow (gpm)</u>
VBS MY C01A/B	96
VBS MY C02A/C	97
VBS MY C02B/D	52
VAS MY C07A/B	12.3
VAS MY C12A/B	8.2
VAS MY C06A/B	8.2

Controls in the MCR operate to cause the components listed in Table 2.7.2-1 to perform the listed functions.

The displays identified in Table 2.7.2-1 can be retrieved in the MCR.

ITAAC Determination Basis

This ITAAC required testing and inspections to be performed to verify that the Central Chilled Water System (VWS) provides the required chilled water flows to the air handling units for the Main Control Room (MCR), the Class 1E electrical rooms, and the Normal Residual Heat Removal System (RNS) pump room coolers and Chemical and Volume Control System (CVS) pump room coolers (Attachment A). Testing also verifies controls in the MCR operated to cause components listed in COL Appendix C Table 2.7.2-1 (Attachment B) to perform their listed function and an inspection was performed to verify the displays identified in COL Appendix C Table 2.7.2-1 can be retrieved in the MCR (Attachment C).

The water flow to each cooling coil equals or exceeds the following:

<u>Coil</u>	<u>Flow (gpm)</u>
VBS MY C01A/B	96
VBS MY C02A/C	97
VBS MY C02B/D	52
VAS MY C07A/B	12.3
VAS MY C12A/B	8.2
VAS MY C06A/B	8.2

Testing was performed in accordance with the work order and preoperational test procedures found in Reference 1 that verified the cooling water flow to each cooling coil equals or exceeded the required flow rates.

Initial conditions were established with Low Capacity Chiller MS-02 in service and temporary flow instruments were installed on the outlet line from each of the coolers tested. The flow control valves were manually opened to ensure full flow through the affected 6 coolers. When the chilled water flow stabilized, 10 flow readings were taken at 3 minute intervals. The flow value for each cooler was verified to be above the required values, and the system was restored to normal. This testing was then repeated with the Low Capacity Chiller MS-03 and the remaining 6 cooler units. This testing shows that the flows obtained (Attachment A) were greater than or equal to the ITAAC acceptance criteria required flows.

Controls in the MCR operate to cause the components listed in Table 2.7.2-1 to perform the listed functions.

Testing was performed in accordance with component test work order found in Reference 1 and verified that controls exist in the MCR and the controls operated to cause the components listed in Table 2.7.2-1 (Attachment B) to perform the listed functions.

The component test began with the components in Attachment B in the closed position or shutdown condition. The valves were stroked to the open position using controls in the MCR, were locally verified to be in the correct position, and documented in the test. The ventilation components were started using controls in the MCR, were locally verified to have started and documented in the test. The test results confirm that controls in Unit 4 MCR operate to cause the components listed in Table 2.7.2-1 to perform the listed functions.

The displays identified in Table 2.7.2-1 can be retrieved in the MCR.

The inspection was performed in accordance with component test work order listed in Reference 1 and verified that the displays identified in Table 2.7.2-1 (Attachment C) can be retrieved in the MCR.

Inspection occurred at an operator work station in the Unit 4 MCR and verified all of the displays identified in Attachment C could be retrieved. This confirms that the displays identified in Table 2.7.2-1 can be retrieved in the Unit 4 MCR.

The completed test results (Reference 1) confirm that the low capacity chillers provide the required flow to the listed components, that the controls in the MCR operate to cause the

components listed in Table 2.7.2-1 to perform the listed functions, and that the displays identified in Table 2.7.2-1 can be retrieved in the MCR.

Reference 1 is available for NRC inspection as part of Unit 4 ITAAC 2.7.02.03a Completion Package (Reference 2).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.7.02.03a was performed for VEGP Unit 4 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. SV4-VWS-ITR-800703, Rev 0, "Unit 4 Recorded Results of VWS Chilled Water Cooling Coils Flow: ITAAC 2.7.02.03a Items 3.a, 4 and 5. NRC Index Number: 703"
2. 2.7.02.03a-U4-CP-Rev0, ITAAC Completion Package

Attachment A

Chiller Unit	Unit	Coil Number	ITAAC Required Flow (gpm)	Actual Flow (gpm)
MS-02	4	VBS MY C01A	96	108.0
	4	VBS MY C02A	97	108.9
	4	VBS MY C02D	52	58.6
	4	VAS MY C06A	8.2	9.9
	4	VAS MY C07A	12.3	14.8
	4	VAS MY C12B	8.2	10.2
MS-03	4	VBS MY C01B	96	104.3
	4	VBS MY C02B	52	58.5
	4	VBS MY C02C	97	108.4
	4	VAS MY C06B	8.2	9.7
	4	VAS MY C07B	12.3	14.6
	4	VAS MY C12A	8.2	9.7

Attachment B
***Excerpt from COL Appendix C Table 2.7.2-1**

*Equipment Name	*Tag No.	*Control Function
Air-cooled Chiller	VWS-MS-02	Start
Air-cooled Chiller	VWS-MS-03	Start
Air-cooled Chiller Pump	VWS-MP-02	Start
Air-cooled Chiller Pump	VWS-MP-03	Start
CVS Pump Room Unit Cooler Fan A	VAS-MA-07A	Start
CVS Pump Room Unit Cooler Fan B	VAS-MA-07B	Start
RNS Pump Room Unit Cooler Fan A	VAS-MA-08A	Start
RNS Pump Room Unit Cooler Fan B	VAS-MA-08B	Start
Air-cooled Chiller Water Valve	VWS-PL-V210	Open
Air-cooled Chiller Water Valve	VWS-PL-V253	Open

Attachment C
***Excerpt from COL Appendix C Table 2.7.2-1**

*Equipment Name	*Tag No.	*Display
Air-cooled Chiller	VWS-MS-02	Yes (Run Status)
Air-cooled Chiller	VWS-MS-03	Yes (Run Status)
Air-cooled Chiller Pump	VWS-MP-02	Yes (Run Status)
Air-cooled Chiller Pump	VWS-MP-03	Yes (Run Status)
CVS Pump Room Unit Cooler Fan A	VAS-MA-07A	Yes (Run Status)
CVS Pump Room Unit Cooler Fan B	VAS-MA-07B	Yes (Run Status)
RNS Pump Room Unit Cooler Fan A	VAS-MA-08A	Yes (Run Status)
RNS Pump Room Unit Cooler Fan B	VAS-MA-08B	Yes (Run Status)
Air-cooled Chiller Water Valve	VWS-PL-V210	Yes (Position Status)
Air-cooled Chiller Water Valve	VWS-PL-V253	Yes (Position Status)